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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,421	02/05/2002	Mei Chuah	426882005100	2981

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EXAMINER

FELTEN, DANIEL S

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 09/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/072,421

Applicant(s)  
Chuah

Examiner  
Daniel Felten

Art Unit  
3624



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Feb 5, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

## DETAILED ACTION

### *Drawings*

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### *Claim Objections*

2. Claim 1 is objected to because of the following informalities:

Delete "VC" and substitute, --venture capital ("VC")--.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1 4. Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marshall  
2 (US 5,675,746).

3  
4 **Regarding Claims 1, 11, 20, 28, 35 and 41:**

5 Marshall discloses in claims 1, 11, 20, 28, 35 and 41 a method to generate a display (see  
6 Marshall, figs 3A-D), on a display device (see Marshall, *screen display*, col. 13, ll. 28-51),  
7 representing investments in a plurality of industries (see Marshall, col. 5, ll. 5-20; and col. 6, ll.  
8 15-21), comprising:

9 allocating a plurality of portions of the display device to correspond to a plurality of  
10 separate industries (see Marshall col. 6, 15-21) ;

11 allocating a sub-portion of each portion to a sub-industry of the industry to which that  
12 portion corresponds (see col. 6, ll. 21-24; and col. 12, ll. 36-47) ; and

13 within the sub-portion, displaying a shape for each venture capital portfolio company in  
14 that sub-industry , wherein the shapes are arranged in a polygon, including determining the  
15 spatial relationship among the shapes in the polygon based on a particular characteristic  
16 associated with the portfolio companies (see Marshall, col. 6, ll. 23-50);

17 also as in claim 20, allocating a plurality of portions of the display to correspond to a  
18 plurality of separate *time* segments (see Marshall, col. 11, ll. 30-55);

19 also as in claim 28, allocating a plurality of portions of the display to correspond to a  
20 plurality of separate *ranges* of a first characteristic (see Marshall, *configure*, col. 6 , ll. 10-50)

21 Marshall fails to disclose the generated display represents *venture capital* investments.

22 Since Marshall does involve industry groups which are tracked for investment purposes , it

1 would have been obvious for an artisan of ordinary skill at the time of the invention to recognize  
2 that a subgroup in any growing industry will be portions which represent small start-up  
3 companies which provide investors with investment opportunities to get in on the "ground floor"  
4 of a new company before it becomes a large, well sought after, company. Thus for an artisan to  
5 modify Marshall's invention so that the display represents venture investments would be  
6 considered an art recognized equivalent to the other industrial and financial investments Marshall  
7 discloses, and thus an obvious expedient well within the ordinary skill in the art.

8 Marshall fails to disclose that the shape for each portfolio is a spiral. However, Marshall  
9 discloses a polygon as well as other shapes being used to readily extract patterns to allow the user  
10 to readily locate relevant financial information and to interact with different characteristics and  
11 see financial trends (see col. 3, ll. 59+). It would have been obvious for an artisan at the time of  
12 the invention of Marshall to employ different shapes, colors, etc., to provide the aforementioned  
13 benefits because an artisan would recognize the advantage of different, shapes, patterns, colors,  
14 etc., to save time as well more readily comprehend the various information within the system.  
15 Thus to employ a spiral would be considered a mere matter of design choice to one of ordinary  
16 skill in the art.

17  
18 **Regarding Claim 2, 12:**

19 The method of claim 1, wherein:

20 the step of allocating a sub-portion of each portion includes allocating a plurality of sub-portions,  
21 each sub-portion allocated to a separate sub-industry of the industry allocated to that portion (see  
22 Marshall col. 6, ll. 14-49).

**Regarding Claim 3, 13:**

The method of claim 2, wherein:  
the step of allocating the plurality of sub-portions includes arranging the subportions according to  
a characteristic of the sub-industries to which the sub-portions are allocated (see Marshall col. 6,  
ll. 21-22).

**Regarding Claim 4, 14:**

The method of claim 1, wherein:  
the particular characteristic is a first particular characteristic; and  
the shape displaying step includes displaying each shape with an indication of a second particular  
characteristic (see Marshall col. 6, ll. 14-49).

**Regarding claim 5-8, 10, 15-18:**

the first particular characteristic is an amount of time since the venture capital portfolio  
company was seeded; and the second particular characteristic is total venture capital investment  
for that company as of a particular time (see Marshall, col 11, ll. 29-55; col. 6, ll. 10-50; col. 4,  
ll. 55-63; and col. 11, 29-45).

**Regarding Claim 9, 19:**

the indication with which each shape is displayed in the shape displaying step includes color (see  
Marshall, col. 6, ll. 10-50).

**Regarding Claim 21:**

the characteristic includes a return on investment measurement for the venture capital (see explanation on claim 1).

**Regarding Claim 22:**

the step of displaying an indication of a value of a characteristic of the venture capital firm includes displaying a rectangle having a length based on the value of the characteristic (see explanation on claim 1).

**Regarding Claim 23:**

the characteristic includes return on investment (see explanation on claim 1).

**Regarding Claim 24:**

the characteristic is a first characteristic; the method further comprises displaying the rectangle with a color based on a second characteristic of the venture capital firm (see explanation on claim 1).

**Regarding Claim 25:**

the step of displaying an indication of a value of a characteristic of the corresponding venture capital investments includes displaying a shape having a color based on the value of the characteristic (see explanation on claim 1).

1 **Regarding Claim 26:**

2 the plurality of portions are first portions, and the at least one venture capital investment  
3 firm is a first venture capital firm; and the method further comprises allocating a plurality of  
4 second portions of the display to correspond to the plurality of time segments; and

5 at each of the plurality of second portions, displaying an indication of a value of the first  
6 characteristic of at least one second venture capital firm in the time segment to which that second  
7 portion corresponds (see explanation on claim 5).

8  
9 **Regarding Claim 27:**

10 wherein the first portion corresponding to a particular one of the time segments is adjacent to the  
11 second portion corresponding to the particular one of the time segments (see explanation on  
12 claim 5).

13  
14 **Regarding Claim 29:**

15 The method of claim 28, wherein: the first characteristic includes time (see explanation on claim  
16 5).

17  
18 **Regarding Claim 30:**

19 the step of displaying an indication of a value of the second characteristic of the object includes  
20 displaying a rectangle having a length based on the value of the second characteristic (see  
21 explanation on claim 1).



1 **Regarding Claim 31:**

2 displaying the rectangle having a color based on the value of a third characteristic of the object.  
3 the step of displaying an indication of a value of the second characteristic of the corresponding  
4 object includes displaying a shape having a color based on the value of the second characteristic  
5 (see explanation on claim 1).  
6

7 **Regarding Claim 33:**

8 the plurality of portions are first portions, and the at least one object is a first object; and  
9 the method further comprises

10 allocating a plurality of second portions of the display to correspond to the plurality of  
11 separate ranges of the first characteristic; and

12 at each of the plurality of second portions, displaying an indication of a value of the  
13 second characteristic of at least one second object in the range of the first characteristic to which  
14 that second portion corresponds (see explanation on claim 1).  
15

16 **Regarding Claim 34:**

17 the first portion corresponding to a particular one of the time segments is adjacent to the second  
18 portion corresponding to the particular one of the time segments (see explanation on claim 5).  
19  
20  
21  
22

1 **Regarding claim 36:**

2 the first shapes are rectangles; and the second shapes are rectangles (see explanation on claim 1).

3  
4 **Regarding Claim 37:**

5 The method of claim 35, wherein: the first shapes are rectangles; and each first shape indicates  
6 the number of associated venture capital firms by the length of that rectangle (see explanation on  
7 claim 1).

8  
9 **Regarding Claim 38:**

10 The method of claim 35, wherein: the second shapes are rectangles; and each second shape  
11 indicates the value of the second particular characteristic by the length of that rectangle (see  
12 explanation on claim 1).

13  
14 **Regarding Claim 39:**

15 each first shape indicates the number of associated venture capital firms by the length of the  
16 rectangle that is that first shape; each second shape indicates the value of the second particular  
17 characteristic by the length of the rectangle that is that second shape; and the lengths of the  
18 rectangles that are the second shapes are perpendicular to the lengths of the rectangles that are the  
19 first shapes (see explanation on claim 1).

1 **Regarding Claim 40:**

2 second shape indicates a third particular characteristic of that venture capital firm by the color of  
3 the second shape (see explanation on claim 1).

4  
5 **Regarding Claim 42:**

6 The method of claim 41, wherein: the first shapes are rectangles; and the second shapes are  
7 rectangles (see explanation on claim 1).

8  
9 **Regarding Claim 43:**

10 The method of claim 41, wherein: the first shapes are rectangles; and  
11 each first shape indicates the number of associated objects by the length of that rectangle (see  
12 explanation on claim 1).

13  
14 **Regarding Claim 44:**

15 the second shapes are rectangles; and each second shape indicates the value of the second  
16 particular characteristic by the length of that rectangle (see explanation on claim 1).

17  
18 **Claim 45:**

19 each first shape indicates the number of associated objects by the length of the rectangle that is  
20 that first shape;

21 each second shape indicates the value of the second particular characteristic by the length of the  
22 rectangle that is that second shape; and

1 the lengths of the rectangles that are the second shapes are perpendicular to the lengths of the  
2 rectangles that are the first shapes (see explanation on claim 1).

3  
4 **Claim 46:**

5 the second shape indicates a third particular characteristic of that object by the color of the  
6 second shape (see explanation on claim 1).

7  
8  
9 ***Conclusion***

10  
11 5. A list of relevant prior art appears below not relied upon in this Office Action:

12 **US Patents:**

13 Wexelblat et al (US 5,021,976) discloses a method and system for generating dynamic,  
14 interactive visual representations of information structures within a computer

15 Kisiel (US 6,327,586 B1) discloses a system and computer program product to automate the  
16 management and analysis of heterogeneous data

17 Leshem et al (US 6,341,310 B1) discloses a system for facilitating the viewing and analysis of  
18 web site usage data

19 Matsuda (US 6,346,956 B2) discloses a three-dimensional virtual reality space display  
20 processing method and an information providing medium

21 Johnson et al (US 4,814,755) discloses an interactive display system

22 Brown (US 5,832,448) discloses a multiple patient monitoring system for proactive health  
23 management

24 Foley et al (US 5,706,502) discloses an Internet-enabled portfolio manger system and method

1 Hocker et al (US 5,801,699) discloses an icon aggregation on a graphical user interface

2 Burg et al (US 6,362,840 B1) discloses a method and system for graphic display of link actions

3 Nielson (US 6,337,699 B1) discloses visualizing degrees of information object attributes

4 Szabo (US 5,966,126) discloses graphic user interface for database system

5 6. Any inquiry concerning this communication or earlier communications from the examiner

6 should be directed to **Daniel S. Felten** whose telephone number is (703) 305-0724. The

7 examiner can normally be reached between the hours of 7:00AM to 5:30PM Monday-Thursday.

8 Any inquiry of a general nature relating to the status of this application or its proceedings should

9 be directed to the Customer Service Office (703) 306-5631, or the examiner's supervisor

10 **Vincent Millin** whose telephone number is (703) 308-1065.

11  
12 7. Response to this action should be mailed to:

13  
14 Commissioner of Patents and Trademarks

15 Washington, D.C. 20231

16  
17 for formal communications intended for entry, or (703) 305-0040, for informal or draft  
18 communications, please label "Proposed" or "Draft".

19 Communications via Internet e-mail regarding this application, other than those under 35  
20 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be  
21 addressed to [[daniel.felten@uspto.gov](mailto:daniel.felten@uspto.gov)].

22 All Internet e-mail communications will be made of record in the application file. PTO  
23 employees do not engage in Internet communications where there exists a possibility that  
24 sensitive information could be identified or exchanged unless the record includes a properly  
25 signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly

Serial Number: 10/072,421

Applicant(s): Chuah ( 705/ )

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Representative: Hodes (38,185)

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1 set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and  
2 Trademark on February 25, 1997 at 1 195 OG 89.

3  
4   
5 DSF

6 September 3, 2002  
7  
8

  
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SUPERVISORY PATENT EXAMINER  
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